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INDONESIA'S AGRICULTURE

**FOREIGN
AGRICULTURE
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Washington, D. C. 20250**Situation and Policy**ERS-FOREIGN-21
March 1962By Robert M. McConnell
Regional Analysis DivisionSummary

During 1961, Indonesia began work under its ambitious new Eight-Year Plan (1961-68). The Plan calls for substantial increases in the production of agricultural crops and at the same time, development of the nation's industrial capacity. Further controls over the economy also appeared; nine large state trading corporations were formed to handle all aspects of the foreign trade of certain commodities; ceiling prices were set for many necessary consumer goods; and some foreign-owned plantations were nationalized.

Indonesia's agricultural production during 1960 advanced slightly above the level of recent years, and this level was maintained through 1961. However, this output is far below the high level experienced during the mid-1950's. Despite the slight overall improvement in the agricultural sector, the production of some of the country's major commercial crops was reduced. Thus, after an increase, during early 1960 in the foreign exchange earnings realized from the exportation of these crops, the country has been experiencing a decline in these holdings.

The nation's real income per capita has declined during the period under study and recently rationing has become a part of the economy. Shortages of many consumer items, including such major foods as rice and sugar, have occurred frequently.

General Economic Situation

Although some important steps forward were taken during 1960 and 1961, the period could not be termed either progressive or promising from the standpoint of the general economy. Throughout this time, Indonesia's economy experienced a great deal of pressure.

The economy, already subject to inflationary tendencies, continued its upward inflationary spiral. However, there was some improvement in mid-1960 due to a combination of three factors: (1) the stabilization of the supply of money; (2) the attraction of speculative capital into free list import financing; and (3) the increased supply of domestic and foreign consumer goods. According to figures published by the Indonesian Central Bureau of Statistics, the cost of living index (1953 = 100) for the low income sector of the population rose to 308 in June 1960, and was 375 in December of that year. By February 1961, it was 423.

A feature of the economy during 1961 was the return of rationing for many consumer goods, especially basic foodstuffs. Indonesia's antiquated transportation and marketing systems coupled with production setbacks for certain crops has brought this into existence. Recently, there have been serious food shortages in parts of this island Nation.

Government Policies

General

In an effort to realize economic goals, Indonesia has set up a form of guided economy. Within this framework the Government will eventually have control of, or supervision over, all parts of the economy. This will be accomplished through large State-owned companies or corporations. However, Government officials state that private enterprise will be allowed to operate in some areas of the economy.

The Government, in order to help the people of Indonesia secure their "basic and daily" needs, has entered the marketing system of the country. Ceiling prices for certain crops and items have been established throughout the market system at the farm, wholesale, and retail level. In 1960, ceiling prices were established for such things as: rice, margarine, cooking oil, bread, crystal sugar, certain vegetables, and some other foodstuffs. Not only is the Government responsible for supplying food and clothing to the Armed Forces, but also to the crowded urban areas and Government employees, many of whom work on the nationalized estates and in the petroleum producing areas. To meet these requirements, the Indonesian Government procures foodstuffs and manufactured goods and passes these goods onto the consumers through approved outlets. These outlets are mainly commissaries or cooperative purchasing groups and nearly everyone belongs to one of these organizations.

Agriculture

Agricultural Production: In early 1961, the Indonesian Government launched its comprehensive Eight-Year Plan (1961-68). All other agricultural development projects have been brought under the program. Through the Plan Indonesia hopes to become self-sufficient in agricultural commodities, with the possible exceptions of dairy products and raw cotton, and to encourage industrial development. To meet the goal set for the agricultural sector, the production of foodstuffs is to be raised to meet fundamental requirements. At the same time the Plan calls for a quantity increase and quality improvement in the production of export crops.

For many years Indonesia has strived for self-sufficiency in the production of rice. Under "Operation Prosperity," launched in 1960, the country was to become self-sufficient in rice production by the end of 1962. This project, with no alterations was incorporated into the Eight-Year Plan. However, the Government now realizes that the goal of rice self-sufficiency within the near future--which also envisioned an exportable surplus--will not be reached. The large annual population growth has absorbed most gains made in production. Also, when supplies are plentiful there has been a tendency towards increased per capita consumption of rice.

A feature of rice self-sufficiency project is the establishment of rice paddy centers. At present, there are 150 and the Government hopes to have 500 within 3 years. The area serviced by the centers is to be increased to 7.4 million acres from 1.2 million acres. Likewise, supplies of fertilizer must be increased to 300,000 tons from 50,000 tons and paddy seed to 150,000 tons from 25,000 tons. At the beginning of the growing season, the centers extend credit, and supply seeds and fertilizer to the farmers. The farmers repay the loans in produce at harvest time. In addition to this service function, the centers are utilized by the Government as a means of procuring the rice needed to fulfill its responsibility to certain groups of people. A local farmer, after repaying any loan he might have, may sell any or all of the remainder of his crop to the center for cash. A drawback to this system, from the peasant's point of view, is that there is a ceiling price on these sales, but no floor price. This would seem to blunt the incentive for the farmers to grow more rice. The procurement system proved unsatisfactory during 1961 and caused shortages in some urban areas.

Rubber has been, and continues to be, Indonesia's leading foreign exchange earner. However, much of the acreage devoted to rubber is planted to old low yielding varieties. The Government has outlined a project within the Eight-Year Plan, which provides for the rejuvenation of rubber production. A report of the Indonesian Department of Agriculture shows that in 1961, 44,500 acres of estate land were replanted with improved stock and 17,300 acres of new rubber acreage were planted on smallholder land.

The Government also realizes the need for a revitalization of the copra industry. At present, more than half of the nation's coconut trees are over 50 years old. A long range schedule for replanting has been incorporated in the Plan, but to date only small scale replanting has taken place.

Under the Eight-Year Plan, many other ambitious projects are to be launched. Greater production is envisioned for such commodities as soybeans, animal products, and textile raw materials. Revenues are to be increased through enlarged production and better quality of such foreign exchange earners as rubber, copra, timber, and fishery products. Industry connected with agriculture is also slated for expansion. Indonesia has an optimistic blueprint for increased plant and mill facilities in such sectors as latex, sugar, pulse, copra, fertilizer, and textiles.

A section of the Eight-Year Plan is devoted to projects dealing with water and its uses. Indonesia is subject to wet and dry seasons and thus agriculture often suffers from too much or too little water. Heavy rains during the wet season create damaging floods while lack of water, sometimes during the following dry season, causes drought damage. Along with plans already drawn for the construction of new drainage and irrigation systems, work on restoration of the old irrigation systems is to be carried out. For the most part, foreign capital is being used to finance this work. With better water management, the Government believes it will be possible to bring more land into rice production, and produce two and three rice crops on many of the existing paddies.

Land Tenure: Indonesia's Basic Agrarian Act Number 5 went into effect on September 24, 1960. This Act, in addition to the Act Number 1 of 1958, sets forth the legal procedure under which the Government may carry out land reform. There are two main points contained in the 1960 Act: (1) the rights of land ownership and inheritance for Indonesian citizens is recognized, and (2) a restriction is placed on the property rights of non-Indonesians.

Although there was a lengthy discussion on the size of holdings which should be permitted under the Act, no definite conclusion was reached. It was generally felt that a minimum land holding should be 5 acres, while the maximum would range from 25 acres on Java to 50 acres on some of the Outer Islands. Land registration has been conducted, and the Government has decided to start redistribution as early as the end of the 1961-62 growing season.

Aside from redistribution of existing land, the Government plans to move people to new lands to be opened on the Outer Islands. At present the average Indonesian land owning farmer only has about 1.2 acres, and on Java the average may be as low as 0.9 acres. However, in many parts of Indonesia, large land holdings are in the hands of tribal chiefs or cooperatively held by villages or clans.

During mid-1961 in line with the Agrarian Act, the Indonesian Government cancelled the original titles of all foreign-owned rubber plantations. The old titles for the plantations were classified into two broad categories: (1) leasehold, and (2) concessions. When the Act went into effect all leasehold titles were automatically transferred to rights of exploitation. These rights will be good for either the life of the original leaseholder or 20 years, whichever is the shorter. Although provision is made for renewing the rights it is presumed no foreigner will be allowed to do so beyond the 20-year limit. The titles falling in the concession category, some of which are for the American-owned rubber plantations, must be transferred to rights of exploitation by filing application with the Minister of Agrarian Affairs. If an application is not filed or no agreement can be reached on conditions for conversion of the title, the original concession rights will expire within 5 years. At present many plantations are negotiating with the Government to continue their operation.

Indonesia has long been faced with the problem of overpopulation on the islands of Java and Madura. These islands account for nearly two-thirds of Indonesia's approximately 96 million people, yet are less than 9 percent of the total land area. The Government, with the goal of providing a better life for its people, set up a program for the migration of people from these crowded areas to the less populated Outer Islands. Many of these islands are quite fertile and unexploited. The Department of Transmigration, Cooperatives, and Community Development, which is charged with the execution of the program, expects to move 11 million people before 1968. During 1959, 22,000 families (approximately 100,000 people) were resettled in these areas. In 1960, some 6,000 families (about 30,000 people) were moved to land in South Sumatra. This project has proved successful. Recently an additional 30,900 acres were opened at the cost of Rp. 75 $\frac{1}{2}$ /million. Although each family has received only 2 acres, the program's aim is for a final holding of 5 acres.

1/ Rupiah (Rp.) 45 = U.S. \$1.00.

The Indonesian Government maintains no direct subsidy program for agriculture, either on production or acreage. However, the rice paddy centers do extend a form of subsidy. The fertilizer and other supplies provided the farmers are sometimes given at rates below cost. Although ceiling prices are maintained for most agricultural commodities, there are no support prices.

Production Situation 2/

Weather conditions, for the most part, were beneficial to Indonesia's agriculture during the 1960 growing season and there were no major production setbacks reported. In addition, the improvement in the security conditions allowed many large plantations to return to full production capacity. More produce arrived in the urban areas due to an improvement in the nation's transportation facilities; a very important factor for a nation which extends over 3,000 miles from end to end. All of these conditions continued into 1961 and the level of production remained approximately equal to the previous year.

Food Crops

Rice: The 1960 production of Indonesia's staple food continued the upward trend of recent years. This was a result of both an increase in the total acreage harvested and production per acre. The acreage increase was due, in part, to better security conditions in the rural areas and also to sufficient rainfall which allowed the planting of areas not generally used for rice. Due to a predicted increase in rice acreage, the 1961 rice crop is expected to increase 2.4 percent over 1960. There is, however, an indicated drop in production per acre. With an average annual population increase of 2.5 percent, there probably also will be a decrease in the production per capita.

Despite the rice self-sufficiency program, the Indonesian Government had to import 961,000 metric tons of rice in 1960 to meet domestic consumption needs. This represented over 11 percent of production. In 1961 rice imports appeared to approximate 800,000 metric tons, although it is possible that the level may have been as high as 1.0 million metric tons.

A further increase in acreage diverted to the production of rice is the aim of the Government. However, whether the production per acre can be increased soon is subject to debate; lack of good seed, fertilizer, and trained personnel are some of the limiting factors.

Since estimates used in this report were made, it has been reported, though not verified, that during the latter part of 1961, adverse weather conditions affected Indonesia's rice crop. The second crop on Java, the principal producing area, was reportedly reduced by a prolonged drought. On the basis of this information, a later estimate of the total rice production placed the level below that used in this report for 1961, and also below the 1960 production figure. If this proves true, Indonesia may be faced with a serious food shortage which may be relieved only by large imports of rice or other basic foodstuffs.

2/ The years referred to in this section are crop years, and therefore the harvests of some commodities continued into 1962.

Table 1.--Indonesia: Acreage and Production of Principal Crops, 1959, 1960 and 1961 ^{1/}

Commodity	1959		1960		1961 ^{2/}	
	Acreage	Production	Acreage	Production	Acreage	Production
	1,000	1,000	1,000	1,000	1,000	1,000
	acres	m. t.	acres	m. t.	acres	m. t.
Rice, milled	17,676	7,975	18,011	8,540	19,000	^{3/} 8,750
Corn	5,658	2,092	6,500	2,486	6,670	2,430
Cassava (wet root)	3,598	^{4/} 12,697	3,445	11,142	3,410	11,040
Sweet potatoes	944	2,719	969	2,709	964	2,700
Soybeans	1,513	431	1,607	437	1,680	440
Peanuts, shelled	899	256	931	250	939	250
Sugar	242		245		242	
cent.		855		674		650
non-cent.		263		303		303
Rubber	2,965	733	3,336	700	3,361	710
Copra	4,123	1,100	4,200	1,117	4,200	1,200
Palm oil		137		141		140
kernel	213	33	222	33	222	35
Tobacco	453	75	430	75	420	73
Coffee	660	90	667	91	667	92
Tea	314	63	316	67	316	68

^{1/} Years refer to crop year. ^{2/} Forecast. ^{3/} Recent estimates indicate a reduction of this figure may be justified. ^{4/} Revised.

U.S. Foreign Service Dispatches.

Central Bureau of Statistics. Statistical Pocketbook of Indonesia 1960. Djakarta, 1960.

Corn: The production of this commodity has been subject to yearly fluctuations in spite of the steady increase in acreage. The 1960 production was the the second largest in recent years, and this level was maintained in 1961. Although there has been a shift from corn to rice in the Indonesian diet, the Government has gone forward with a program to increase corn production. At present the use of better seed is the aim of the program.

Cassava: Although cassava remained the country's third most important food crop, production decreased in 1960. This drop was due primarily to a decrease in acreage. In many instances, abundant rainfall made possible the diversion of land to rice. The production decline continued in 1961. In recent years, the large estates have been reducing their cassava acreage because of low prices received for the commodity. This reduction has been offset to some extent, however, by increases in the smallholder production of the product.

Potatoes: The 1960 production of sweet potatoes was below the 1959 output, despite a small increase in acreage. The amount of land suitable for production of potatoes is limited and, therefore, further increase in acreage can not be expected. The 1961 production approximated the 1960 figure. Only a small amount of white potatoes are grown, mainly on Java and Madura.

Soybeans: The market for this commodity remained good in 1960. Acreage increased as land was shifted from other crops, but the output per acre decreased. Thus, there was only a slight upward movement in total production. Soybeans are used principally in the fermented cake form and there is no reported crushing for oil. Since the demand for soybeans continues strong, there was a further shift of land into production and thus a small increase in output was registered in 1961.

Peanuts: The lower yield of this commodity in 1960 offset an acreage increase and resulted in a decrease in total production. Land continued to be diverted to peanuts in 1961, but production per acre declined and at best remained equal to 1960. Only a limited amount of peanuts are grown for oil in Indonesia; most are consumed whole or broken in food dishes.

Commercial Crops

Rubber: Indonesia's 1960 production of rubber declined slightly from the high level of 1959. However, rubber exports dropped nearly 20.0 percent; 1959 exports were approximately 690,000 metric tons. Despite this decreased rate of export, rubber accounted for nearly 45 percent of Indonesia's foreign exchange earnings in 1960. There has been a decline in rubber production over the past 5 years, due primarily to the shrinking output of the big estate. It is estimated that production in 1961 will exceed slightly the previous year. This will come about from both a small reversal in the trend of estate production and from increased tappings on the part of smallholders. There has been an increase in the rubber area on the smallholders' plantations. In many parts of the Nation these trees will be tapped only when the prices make it profitable. Although prices for rubber have dropped from their previous high, rubber production is still considered profitable, and this shall generate the necessary incentive.

Palm oil and kernel: There was a slight rise in 1960 production of palm oil over 1959; however, palm kernel output remained even. During the last few years there has been little increase in acreage. Despite some insurrection activities aimed at the large Belgium-French estates in North Sumatra in early 1961, production equaled 1960. At present the Indonesian Government is considering the expansion of crushing facilities in some of the North Sumatra Government owned mills.

Copra: There was an increase in production and marketing of Indonesia's most extensively grown crop in 1960. The increased production is attributed to improved security conditions in northern Sulawesi, the main copra producing area. Better distribution patterns increased the level of marketing by allowing more copra to reach the market centers. The last factor also reduced the amount of spoilage. The Government is now faced with the problem of having approximately half of the coconut trees past the age of maximum production.

There were some new plantings reported in 1961. Due to the continued favorable security conditions, there was an increased harvest in 1961, although no acreage increase was predicted.

Sugar: With a production drop of 18.7 percent in 1960, sugarcane output was the most startling aspect of Indonesia's agricultural picture in that year. For the most part, this was due to an excessive shift of land to more profitable crops from cane production. At the same time, the production of refined sugar dropped over 21 percent. Thus, Indonesia which exported 2.5 million metric tons of sugar at one time, exported only 35,000 metric tons in 1960, and during 1961 reported no exports of sugar.

The Government's ceiling price on sugarcane, which does not present sufficient incentive to the grower, has been the main reason for the shift in acreage. Another switch to a more lucrative product is evident in the diversion of an increased amount of the cane to the production of home-made brown sugar. The sugar industry, as a whole, also suffers from a lack of trained personnel. It is believed that sugar production in 1961 will be less than 1960. If this is the case, Indonesia probably will be forced to import sugar to meet its minimum requirements. There have been some sugar shortages reported. North Sumatra, for example, has been subject to a sugar famine and the price for any sugar available has risen beyond the reach of the average Indonesian. In the meantime, the Government in an effort to stem the diversion of cane to home-made brown sugar requires farmers to deliver their cane to specific mills for a fixed price. This action probably adversely affect future cane plantings.

Tobacco: In spite of a slight reduction in the area of production, the 1960 output equaled 1959 because of good rainfall during the year. Exports of cigar wrapper and filler to European auctions increased and continued the recent trend of larger exports.

The predicted 1961 crop will be equal to or a little less than the 1960 crop. Since the yield is expected to be average any decrease in the overall production will be the result of reduction in the area planted. The quality of the 1961 leaf also is reported to be lower than in past years. At present the Government, and in some areas the army, is insisting that growers divert some tobacco land to the production of rice.

Tea: With production area remaining steady, tea production in 1960 rose above the previous year. The principal reason for this was better security conditions which allowed increased pluckings in a number of tea producing areas. The production quotas set by the Government caused many plantation operators to strive for quantity and thus the downward trend in quality continued during 1960.

Although there has been some recent replantings of tea, other areas have been removed from production, and it is expected that the 1961 crop only will equal 1960's high.

Coffee: Indonesia's 1960 coffee harvest exceeded slightly the harvest of the year earlier. In 1961, production is expected to rise again. However, the outlook for any further increase in coffee production area is pessimistic. It is believed that some land in the future will be shifted to the production of more profitable crops such as rubber and tea.

Table 2.--Indonesia: Imports and Exports of Major Agricultural Products, by Quantity, 1959 and 1960

Product	1959		1960	
	Imports	Exports	Imports	Exports
	1,000 m. t.	1,000 m. t.	1,000 m. t.	1,000 m. t.
Rice, milled	604	--	961	--
Cassava (wet root)	--	144	--	106
Peanuts, shelled	--	4	--	9
Copra	--	131	--	166
Palm oil	--	103	--	109
kernel	--	33	--	34
Dairy products	16	--	8	--
Meat and poultry	--	6	--	7
Sugar, cent.	--	39	--	35
Coffee	--	38	--	41
Tea	--	33	--	35
Spices:				
Nutmeg	--	2	--	5
Cinnamon	--	5	--	8
Cloves	6	--	7	--
Pepper	--	1/ 29	--	1/ 12
Rubber	--	689	--	556
Tobacco	1	16	1	23
Cotton	6	--	11	--
Sisal & manila hemp	--	20	--	16

1/ Figures do not include possible "unregistered" exports or quantities smuggled out of the country.

U.S. Foreign Service Dispatches.

Central Bureau of Statistics. Statistical Pocketbook of Indonesia 1960. Djakarta, 1960.

Trade

With an increase in the volume of exports during 1960 which offset a decrease in the unit value, Indonesia again maintained a favorable balance of trade. However, the amount and value of imports rose above preceding years and cut back the level of the balance from previous highs. Thus, the net foreign exchange earnings were below the preceding year's level.

Foreign exchange holdings declined in 1961 due to both a drop in exports and a further increase in imports. Production of Indonesia's export crops is below the 1960 level and this has reduced the volume of exports. In addition to this, the world market prices for many of these commodities are at their lowest points in many years. During 1961 Indonesia increased imports of such vital commodities as fertilizer, textiles, yarns, and raw material for industry.

Table 3.--Indonesia: Total Value of Trade and Value of Trade with U.S., 1953-60 Annual, 1960 and 1961 Quarterly

Year Quarter	Exports		Imports	
	Total	To U.S.	Total	From U.S.
	Million U.S. dol.	Million U.S. dol.	Million U.S. dol.	Million U.S. dol.
1952	934	237	948	163
1953	840	172	765	139
1954	867	149	629	91
1955	946	167	630	96
1956	882	141	860	141
1957	969	148	804	133
1958	755	130	514	82
1959	872	143	483	74
1960	<u>1/</u> 840	<u>2/</u> 194	<u>1/</u> 574	<u>2/</u> 89
I	214	--	121	--
II	220	--	141	--
III	195	--	142	--
IV	209	--	171	--
1961				
I	134	--	200	--
II	187	--	189	--

1/ Annual total does not agree with sum of Quarters due to rounding.

2/ Joint publication, U.N. IMF., IBR & D. Statistical Papers. Series T, Vol. XI, No. 11 and 12. United Nations, New York City, 1961.

International Monetary Fund, Statistical Division. International Financial Statistics. Vol. XV. No. 1, Washington, D.C., Jan. 1962.

U.S. Dept. of Commerce, World Trade Information Service. Foreign Trade of Indonesia, 1958-59. Statistical Reports, Part 3, No. 60-63. Washington, D.C., Nov. 1960 (Except as noted).

During the past several years there has been an increased drain on the Nation's foreign exchange reserves. Indonesia has been using these reserves to finance many of its development projects. If Indonesia's trade balance remained unfavorable in 1961, as indicated in Table 3, the country might be faced with a serious financial problem.

A significant development in the trade sector of Indonesia's economy was the establishment of the "Supervisory Board Over State Trading Enterprises", on May 4, 1961. At the same time, the original 38 state trading enterprises were combined into 9 corporations.

Table 4.--Indonesia: Agricultural Trade with the U.S., 1959 and 1960

Commodities	1959		1960	
	Quantity	Value	Quantity	Value
	1,000 m. t.	1,000 dollars	1,000 m. t.	1,000 dollars
Exports to the U.S.:				
Coffee, raw	1	747	1	917
Tea	6	5,109	7	6,220
Patchouli oil	--	--	1/	479
Sisal & henequen	4	549	3	495
Kapok	1	481	2	609
Rubber, crude	161	96,709	150	108,000
Allied gums	1/	481	1/	451
Cassia and cassia vera, unground	5	2,053	4	1,919
Nutmegs, unground	1	2,877	1	2,505
Mace, unground	1/	610	1/	684
Pepper, unground				
Black	11	5,853	6	6,726
White	1	870	1	1,573
Vanilla beans	--	--	1/	163
Goat and kid skins	1/	384	1/	320
Molasses, unfit for human consumption	12	198	12	251
Palm oil	1	133	2	372
Tobacco, unmfed.	1/	139	1/	58
Other agricultural products	--	841	--	219
Total	204	118,034	189	131,961
Imports from the U.S.:				
Nonfat dry milk	3	1,470	1	381
Infants and dietetic foods	--	--	1/	208
Cotton excluding linters	5	3,361	12	6,694
Rice, milled	91	11,505	83	9,674
Wheat flour	9	686	84	6,022
Tobacco, flue-cured, unstemmed	1	1,557	1/	129
Other agricultural products	--	544	--	516
Total	109	19,123	180	23,624

1/ Less than 500 metric tons.

USDA, Foreign Agricultural Service, Foreign Agricultural Trade of the United States. Trade by countries for calendar year 1959. Washington, D.C., July 1960.

USDA, Economic Research Service, Foreign Agricultural Trade of the United States. Trade by countries for calendar year 1960. Washington, D.C., Aug. 1961.

These state trading corporations, which had their origin in the large Dutch trading organizations, handle the importing, exporting, and domestic distribution of a large number of commodities. It is the objective of the Government to have each trading enterprise responsible for the overseas sales and procurement of certain commodities.

Recently, Indonesia has been faced with the problem of a buyers market for some of its agricultural export commodities. This has resulted in either a lower monetary return from sales of some goods such as rubber and coffee or a build-up in domestic stocks of other commodities, such as pepper.

During 1959 and 1960, the United States continued to be one of Indonesia's leading trading partners. In 1960, the United States took 23.1 percent of Indonesia's total exports by value, and Indonesia acquired 15.5 percent of its total imports by value from the United States. Agricultural products accounted for only 27 percent of the imports from the United States, while they accounted for 68 percent of Indonesia's exports. Rubber is the major product exported by Indonesia, with tea and pepper of secondary importance. The United States principal agricultural exports to Indonesia are rice, cotton, and wheat flour, mostly under Government programs.

U.S. Assistance

During 1960 U.S. aid to Indonesia, both Government and private, amounted to over \$80 million. Of this total, approximately \$16 million was agricultural commodities programmed under Public Law 480. In addition to ICA obligations, Indonesia received loans from the Development Loan Fund and the Export-Import Bank. One of the loans from the latter source is to be used for the construction of a fertilizer plant at Palembang, Sumatra.

A major project being carried out in Indonesia with U.S. support is a broad program dealing with agricultural extension techniques for the improvement of the country's agricultural sector. It was begun in 1960 and will terminate in 1964. The project has a number of objectives:

- (1) Raise the annual production rate of improved rice seed to 500,000 tons.
- (2) Increase the production of superior varieties of crops such as corn, soybeans, and peanuts which may be substituted for rice, both in the diet and where applicable in production acreage rotation.
- (3) Expand, within 5 years, the area planted to improved varieties of rice, corn, and other rotation crops on Java to 100 percent of the suitable land for these varieties through the use of local demonstration farms and programs of agricultural extension education.

- (4) Increase production per unit area about 30 percent through the use of good seed, more fertilizer, and control of insects, rodents, and disease.
- (5) Improve existing grain storage facilities and develop new facilities.
- (6) Determine the proper increase in fiber production that would meet domestic needs but not encroach upon land needed for food crop production.
- (7) Conduct demonstrations and studies to improve the use of soil and water resources.
- (8) Develop, by means of overseas training and in-service training, the technical, supervisory, and administrative staffs of agencies within the Indonesian Department of Agriculture which are responsible for increasing food production.
- (9) Conduct work shops to train Indonesians in the field of extension techniques and specific fields of agriculture such as agronomy, irrigation, soil fertility, and seed improvement.

Outlook

A recently conducted national census survey indicates Indonesia has a population of approximately 96 million people and this number is increasing at nearly $2\frac{1}{2}$ percent each year. To feed and clothe these people the Nation's agricultural output must make substantial yearly increases.

Indonesia has the physical resources necessary to increase production of many agricultural commodities. It has a large amount of unused land which can be added to the cultivated land base. Also, production can be enlarged on the land now under cultivation through better use of modern technology. The plans for expansion of the Nation's water storage and irrigation system will, when put into practice, be a boon to agriculture. However, one major factor holding back all of this progress is the need for properly trained personnel.

On February 19, 1962, the United States signed a 3-year Food for Peace agreement with Indonesia. The composition of the agreement, negotiated under Title I of Public Law 480, including approximate quantities is:

Rice	190,000 metric tons	\$24.5 million
Wheat flour	200,000 metric tons	15.0 million
Cotton	242,000 bales	36.3 million
Tobacco	6,000 metric tons	10.0 million

Table 5.--Indonesia: P.L. 480 Agreements and Actual Shipments, Showing Approximate Quantity and Market Value

Commodity	1955-1959 <u>1/</u>				1960 <u>1/</u>				1961 <u>1/</u>			
	Agreement		Shipment		Agreement		Shipment		Agreement		Shipment	
	Qty. :	Value :	Qty. :	Value :	Qty. :	Value :	Qty. :	Value :	Qty. :	Value :	Qty. :	Value :
	1,000 :	1,000 :	1,000 :	1,000 :	1,000 :	1,000 :	1,000 :	1,000 :	1,000 :	1,000 :	1,000 :	1,000 :
	m. t. :	dol. :	m. t. :	dol. :	m. t. :	dol. :	m. t. :	dol. :	m. t. :	dol. :	m. t. :	dol. :
Wheat flour	133.38 :	10,000 :	69.03 :	5,624 :	-- :	-- :	60.96 :	4,350 :	62.00 :	4,600 :	-- :	-- :
Rice, milled	456.63 :	58,800 :	404.77 :	52,733 :	75.00 :	8,700 :	78.53 :	8,703 :	130.00 :	14,700 :	108.84 :	11,083 :
Cotton <u>2/</u>	88.85 :	54,700 :			5.29 :	3,400 :	11.21 :	6,482 :	-- :	-- :	-- :	-- :
Indonesia			12.79 :	7,279 :								
U.K.			4.86 :	2,842 :			-- :	-- :			-- :	-- :
W. Germany			.73 :	436 :			-- :	-- :			-- :	-- :
Belgium			1.09 :	434 :			-- :	-- :			-- :	-- :
Hong Kong			12.85 :	5,689 :			4.05 :	2,136 :			1.83 :	954 :
Japan			22.76 :	14,178 :			21.51 :	10,298 :			4.12 :	4,106 :
Singapore			-- :	-- :			1.64 :	850 :			.88 :	387 :
India			-- :	-- :			-- :	-- :			2.13 :	1,119 :
Yugoslavia			-- :	-- :			-- :	-- :			1.57 :	930 :
Tobacco	11.03 :	14,900 :	11.03 :	14,285 :	1.62 :	2,500 :	-- :	-- :	-- :	-- :	1.43 :	2,224 :
Ocean trans- portation	-- :	11,100 :	-- :	-- :	-- :	1,400 :	-- :	-- :	-- :	3,225 :	-- :	-- :

1/ Calendar year.2/ Includes cotton shipped to third countries for processing.

87th Congress of the United States, First Session, Committee on Agriculture. The Fourteenth Semi-annual Report on Activities of the Food for Peace Program Carried on Under P.L. 480, 83rd Congress, as Amended. House Document No. 223, Washington, D.C., 1961.

USDA, Foreign Agricultural Service. Title I, Public Law 480: Total Shipments by 6-month Periods, Jan. 1955 through June 1959, by country and commodity. SDS-7-61. May 24, 1961.

USDA, Foreign Agricultural Service. Title I, Public Law 480: Total Amounts Programmed and shipped through Dec. 31, 1960, and shipments by 6-month periods, from July 1, 1959, through Dec. 31, 1960, by country and commodity. SDS-8-61. May 24, 1961.

The total value of the contract, including certain ocean transportation costs, is \$92.7 million, of which \$78.8 million (85 percent) will be loaned to the Indonesian Government for development purposes, under Section 104 (g). An additional 5 percent will be set aside for loans under Section 104 (e) to private enterprises in the United States and Indonesia. The balance of 10 percent will be available to the U.S. Government for local use.

To meet the rice shortage Indonesia now faces, approximately 40,000 metric tons of the programmed rice will be shipped immediately. The remainder to be shipped in 1962--50,000 metric tons--will move to Indonesia after the U.S. rice crop is harvested in the latter part of this year.

UNITED STATES DEPARTMENT OF AGRICULTURE

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